

**Directions:** All questions must be completed on loose leaf. A calculator is allowed. Please reduce any fractions to lowest terms. Place a box around your final answer. **ALL WORK MUST BE SHOWN FOR FULL VALUE.**

**Part A:****2 marks each****/12**

Calculate each of the following:

a)  $-6 + 4 - 10 - 8 + 11 - 4 + 8$

b)  $-5 - (-6) - (13) - (-11) - 12$

c)  $\frac{7}{12} + \left(\frac{-1}{3}\right)$

d)  $-3\frac{5}{6} + 1\frac{1}{4}$

e)  $(18 - 3 \times 2)^2 + 4$

f)  $\frac{10 \times 3 - 5 \times 4}{2 + 4 \times 2}$

**Part B: Please answer all questions. 3 marks each****/12**

- 1) Suppose today's temperature is  $3^{\circ}\text{C}$ . Yesterday was  $9^{\circ}\text{C}$  colder. Tomorrow's prediction is for a drop of  $5^{\circ}\text{C}$ . What is the difference between yesterday's temperature and tomorrow's predicted temperature?
- 2) Devin has an online bank account. When Devin opened the account, he deposited \$153. On Monday Devin spent \$15.23 for lunch. On Tuesday, Devin received \$24 from his dad. On Wednesday, Devin purchased some school supplies for \$37.83. On Thursday, He received \$76 for helping his neighbour build a shed. On Friday, Devin went to a movie and spent \$27. How much does Devin have in his bank account at the end of the week?
- 3) Two integers are 18 apart on a number line. One of the integers is 5. List all possible integers that could represent the second integer. Please illustrate with a number line and write the math sentence for each.
- 4) How much is  $\frac{1}{4}$  of  $\frac{2}{5}$ ? Illustrate this question with a diagram.

**Part C:** Complete question 1 and choose any 2 of the remaining 3 questions.  
4 marks each /12

1) Solve:

$$\frac{-3}{2} + \left(\frac{-2}{3}\right) - \left(\frac{-4}{-5}\right) + \left(-1\frac{4}{7}\right) + \left(\frac{-1}{-4}\right)$$

(Leave answer in fraction form)

2) How many more eggs than a dozen are there if you add the number of eggs in a half a dozen to the number in  $\frac{3}{4}$  of a dozen?

3) A recipe uses  $\frac{1}{3}$  cup of sugar for one part of it and  $\frac{2}{5}$  cup for another part.  
How many cups of sugar are used?

4) You add a fraction with a denominator of 4 to a fraction with a denominator of 3. The two fractions are less than 1. When you find your answer and write it in lowest terms, what could be all the possible denominators? **Show your work.**